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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO
09/682,314	08/17/2001	James Kenneth Aragones	RD-28217	2332
41838	7590 09/22/2005		EXAMINER	
GENERAL E	ELECTRIC COMPAN	CRAIG, DWIN M		
C/O FLETCH	ER YODER			
P. O. BOX 692289			ART UNIT	PAPER NUMBER
HOUSTON, TX 77269-2289			2123	

DATE MAILED: 09/22/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)				
	09/682,314	ARAGONES ET AL.				
Office Action Summary	Examiner	Art Unit				
	Dwin M Craig	2123				
The MAILING DATE of this communication ap Period for Reply	ppears on the cover sheet with the c	orrespondence address				
A SHORTENED STATUTORY PERIOD FOR REP THE MAILING DATE OF THIS COMMUNICATION  - Extensions of time may be available under the provisions of 37 CFR 1 after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a re  - If NO period for reply is specified above, the maximum statutory period  - Failure to reply within the set or extended period for reply will, by statu Any reply received by the Office later than three months after the mail earned patent term adjustment. See 37 CFR 1.704(b).	136(a). In no event, however, may a reply be timply within the statutory minimum of thirty (30) days will apply and will expire SIX (6) MONTHS from the cause the application to become ABANDONED.	nely filed s will be considered timely. the mailing date of this communication. O (35 U.S.C. § 133).				
Status						
1) Responsive to communication(s) filed on 6/1	<u>3/2005</u>					
2a) This action is <b>FINAL</b> . 2b) ⊠ Th	is action is non-final.					
,—	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.					
Disposition of Claims						
4) ⊠ Claim(s) 1-93 is/are pending in the application 4a) Of the above claim(s) is/are withdrest is/are allowed.  5) □ Claim(s) is/are allowed.  6) ⊠ Claim(s) 1-93 is/are rejected.  7) □ Claim(s) is/are objected to.  8) □ Claim(s) are subject to restriction and are subject.	awn from consideration.					
Application Papers						
9) The specification is objected to by the Examiner.						
10) ☐ The drawing(s) filed on is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.						
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).						
Replacement drawing sheet(s) including the corre	•	•				
Priority under 35 U.S.C. § 119						
<ul> <li>12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).</li> <li>a) All b) Some * c) None of:</li> <li>1. Certified copies of the priority documents have been received.</li> <li>2. Certified copies of the priority documents have been received in Application No.</li> <li>3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).</li> <li>* See the attached detailed Office action for a list of the certified copies not received.</li> </ul>						
Attachment(s)		•				
1) Notice of References Cited (PTO-892)	4) Interview Summary Paper No(s)/Mail Da					
Notice of Draftsperson's Patent Drawing Review (PTO-948)     Information Disclosure Statement(s) (PTO-1449 or PTO/SB/06 Paper No(s)/Mail Date		atent Application (PTO-152)				

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#### **DETAILED ACTION**

1. Claims 1-93 have been presented for reconsideration based on Applicants' arguments.

# Response to Arguments

- 2. Applicants' arguments presented in the 6-13-2005 responses have been fully considered. The Examiner's response is as follows.
- 2.1 Regarding the Applicants' response to the Provisional Non-Statutory Double Patenting rejections of claims 1-93, Applicant persuasively argued, on page 18 of the 6-13-2005 response, [Applicants understand that this is a provisional double patenting rejection and will consider filing a terminal disclaimer in the event that the copending Application No. 10/707,656 is allowed and issues prior to allowance of the pending claims of the present patent application.] The Examiner finds this argument to be persuasive and withdraws the Non-Statutory Double Patenting rejections of claims 1-93.
- 2.2 Regarding the Applicants' arguments concerning the rejections of claims 1-93 under 35 USC § 103(a), the Applicants' have persuasively argued that the US Patent 6,799,154 is not a valid reference under the 103(c) "shield" law. The Examiner withdraws the 35 USC § 103(a) rejections of claims 1-93.
- 2.3 An updated search has revealed new art.

## Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

The factual inquiries set forth in *Graham* v. *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

- 1. Determining the scope and contents of the prior art.
- 2. Ascertaining the differences between the prior art and the claims at issue.
- 3. Resolving the level of ordinary skill in the pertinent art.
- 4. Considering objective evidence present in the application indicating obviousness or nonobviousness.
- 3. Independent Claims 1, 9, 15, 18, 19, 22, 30, 36, 39, 40, 46, 54, 60, 63, 64, 70, 78 and 86 and dependent Claims 2, 4-6, 8, 10, 12, 13, 16, 20, 23, 25-27, 29, 31, 33, 34, 37, 42, 44, 45, 47, 49-51, 53, 55, 57, 58, 61, 66, 68, 69, 71, 73-75, 77, 79, 81-83, 85, 87, 89-91 and 93 are rejected under 35 U.S.C. 103(a) as being unpatentable over Weinstock et al. U.S. Patent 6,223,143 in view of Aragones et al. U.S. Patent 6,067,486.
- As regards Independent Claims 1, 9, 15, 18, 19, 22, 30, 36, 39, 40, 46, 54, 60, 63, 64, 70, 78 and 86 and using Independent claim 1 as an example, the *Weinstock et al.* reference discloses building/generating a baseline model (Figure 1 item 18-3, Figure 3 item S20, Figure 16 item S1102, Col. 3 lines 13-22, Col. 9 lines 62-67, Col. 10 lines 1-13, Col. 20 Lines 16-24, Col. 24 lines 22-39), using an aircraft engine model (Col. 22 Lines 23-54), and preprocessing the data (Col. 10 Lines 46-62), using a database (Col. 5 lines 63-67, Col. 6 Lines 1-5) using regression analysis (Col. 11 Lines 54-59, Col. 28 Lines 34-37) and grouping the resulting data (Col. 21 Lines 5-22).

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However, the Weinstock et al. reference does not expressly disclose using a service history database.

The Argones et al. reference discloses, using a service history database (Figures 1 and 2 Col. 1 lines 60-67, Col. 2 Lines 1-5, Col. 2 lines 59-67, Col. 3 lines 1-25).

It would have been obvious, to one of ordinary skill in the art, at the time the invention was made to have provided for a Aircraft service history database because, there is a need for a system which reduces the time and effort in collecting and maintaining information regarding an aircraft engine and service requirements, and which allows the service manager to plan repair and overhaul of the aircraft engine in less time with increased accuracy thereby reducing cost for repair of the aircraft engine (Col. 1 lines 52-57 Aragones et al. US Patent 6,067,486).

- As regards dependent Claims 2, 4-6, 8, 10, 12, 13, 16, 20, 23, 25-27, 29, 31, 33, 34, 37, 42, 44, 45, 47, 49-51, 53, 55, 57, 58, 61, 66, 68, 69, 71, 73-75, 77, 79, 81-83, 85, 87, 89-91 and 93, the *Aragones et al.* reference discloses data acquisition (Figure 1 items 60 and 16) and plurality of groups (Figure 1 items 120) and display of data (Figure 1 items 60 and 18), as regards the motivation to combine the references please see section 3.1 of this Office Action. The *Weinstock et al.* reference discloses using a regression model (Col. 11 Lines 54-59, Col. 28 Lines 34-37).
- 4. Dependent Claims 3, 7, 11, 14, 17, 21, 24, 28, 32, 35, 38, 41, 43, 48, 52, 56, 59, 62, 65, 67, 72, 76, 80, 84, 88 and 92 are rejected under 35 U.S.C. 103(a) as being unpatentable over

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Weinstock et al. U.S. Patent 6,223,143 in view of Aragones et al. U.S. Patent 6,067,486 and in further view of Keeler et al. U.S. Patent 6,243,696.

4.1 It is also noted that both the Weinstock et al. and Argones et al. references do not expressly disclose cleaning data.

The Keeler et al. reference discloses cleaning data (Figures 7a-7e, Col. 3 Lines 23-25), the Keeler et al. reference also discloses building/generating a model (Figure 38 and Figure 39 item 486), using a database (Figure 38 items 450 & 452).

It would have been obvious, to one of ordinary skill in the art, at the time the invention was made to have used the teachings in the *Keeler et al.* reference because of the risk of having incoherent or missing data in the regression model can lead to erroneous results (Col. 1 lines 15-67 and Col. 2 Lines 1-31 Keeler et al. US Patent 6,243,696).

## Conclusion

- 5. Claims 1-93 have been presented for reconsideration and rejected. This Office Action is NON-FINAL.
- 5.1 Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dwin M. Craig whose telephone number is (571) 272-3710. The examiner can normally be reached on 10:00 6:00 M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Leo P. Picard can be reached on (571) 272-3749. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

DMC

Primary Examiner
Art Unit 2125